IDS-	11/02/2	no.								Page 1	of l
Form P1	10-1449 U. -82) Pater	S. Departi				Atty. Docket No.			al No.		
(RE V. 2-	-02) Fatei	icang 188	IUEIIIAFK	OHICE		(071838.0142 Applicants		10/	699,035		
	SUPPLE	MENTA	AL INF	ORMA'	ΓΙΟΝ	Bateman et al					
		LOSUR				Filing Date	•	Grou	p Art Unit		
		BY AP	PLICA	NŢ		October 31, 2	003	164			
	(Use so	everal sl	heets if	necessa	ry)						
		· 									
T						IT DOCUMEN	<u>rs</u>	1	<u> </u>	Τ	
*Ex am. Init.		Document	No.		Date	Name		Class	Subclass	Filing D ifApprop	
-	T	· · · · · · · · · · · · · · · · · · ·			FOREIGN PA	TENT DOCUME	NT				
		Document :	Na					61	0.101		slator
		Document	110.	T' I				Class	SubClass	Yes	No
				<u>i i</u>						<u> </u>	<u> </u>
		Genet. 19	999 Nov	r;23(3):3	54-8.	essential for card			•		
								·	100		
				•							
•											

^{*} Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) U.S. PATENT DOCUMENTS *Ex. an Init. Document No. Date Name Class Subclass Filing Date Information Int. *FOREIGN PATENT DOCUMENT *Transity Arrivation Patent Document No. Class Subclass Interpretation Interpretation Patent Document No. Class Subclass Interpretation Patent Document No. Class Subcl		11/02	/2006										Page 1 of 1
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) U.S. PATENT DOCUMENTS *Ex and	IDS 11/02/2006 Form PTO-1449 U.S. Department of Commerce (REV. 2-82) Patent and Trademark Office												
DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) U.S. PATENT DOCUMENTS "Ex am. Init. Document No. Document No. Document No. Document No. THER DOCUMENTS (including Author, Title Date, Pertinent Pages, Etc.) Arikawa-Hirasawa et al., "Dyssegmental dysplasia, Silverman-Handmaker type, is caused by functional null mutations of the perlecan gene. Nat. Genet. 2001 Apr;27(4):431-4. Arikawa-Hirasawa et al., "Perlecan is essential for cartilage and cephalic development," Nat Genet. 1999 Nov;23(3):354-8.							ION	Applicants					
BY APPLICANT (Use several sheets if necessary) U.S. PATENT DOCUMENTS TEX Document No. Date Name Class Subclass Filing Date ItAppropriate Document No. Class Subclass Itappropriate Document No. Class Subclass Vyes No. Class Subclass Vyes No. Class Subclass Subclas									L	ci ai.	1.0	A . 77 **	
U.S. PATENT DOCUMENTS U.S. PATENT DOCUMENTS TEX. Document No. Date Name Class Subclass Filing Date in Interpreparation of the performance of the		DIG					TEM 1	L		1 2002			
U.S. PATENT DOCUMENTS Document No. Date Name Class Subclass Filing Date IfAppropriate						October 3	1, 2003	104	 4				
Ex minit. FOREIGN PATENT DOCUMENT OTHER DOCUMENTS (including Author, Title Date, Pertinent Pages, Etc.) Arikawa-Hirasawa et al., "Dyssegmental dysplasia, Silverman-Handmaker type, is caused by functional null mutations of the perlecan gene. Nat. Genet. 2001 Apr;27(4):431-4. Arikawa-Hirasawa et al., "Perlecan is essential for cartilage and cephalic development," Nat Genet. 1999 Nov;23(3):354-8.		(Use	sever	al she	ets if	nece	ssary	')				 .	
FOREIGN PATENT DOCUMENT Document No. Class SubClass Transl							U	S. PATE	NT DOCUM	ENTS			
OTHER DOCUMENTS (including Author, Title Date, Pertinent Pages, Etc.) Arikawa-Hirasawa et al., "Dyssegmental dysplasia, Silverman-Handmaker type, is caused by functional null mutations of the perlecan gene. Nat. Genet. 2001 Apr;27(4):431-4. Arikawa-Hirasawa et al., "Perlecan is essential for cartilage and cephalic development," Nat Genet. 1999 Nov;23(3):354-8.	am.		Docu	ment No).			Date	Naı	ne	Class	Subclass	Filing Date ifAppropriate
OTHER DOCUMENTS (including Author, Title Date, Pertinent Pages, Etc.) Arikawa-Hirasawa et al., "Dyssegmental dysplasia, Silverman-Handmaker type, is caused by functional null mutations of the perlecan gene. Nat. Genet. 2001 Apr;27(4):431-4. Arikawa-Hirasawa et al., "Perlecan is essential for cartilage and cephalic development," Nat Genet. 1999 Nov;23(3):354-8.					<u> </u>								
OTHER DOCUMENTS (including Author, Title Date, Pertinent Pages, Etc.) Arikawa-Hirasawa et al., "Dyssegmental dysplasia, Silverman-Handmaker type, is caused by functional null mutations of the perlecan gene. Nat. Genet. 2001 Apr;27(4):431-4. Arikawa-Hirasawa et al., "Perlecan is essential for cartilage and cephalic development," Nat Genet. 1999 Nov;23(3):354-8.		<u> </u>					F	OREIGN PA	ATENT DOCU	MENT	<u> </u>	1	·
Arikawa-Hirasawa et al., "Dyssegmental dysplasia, Silverman-Handmaker type, is caused by functional null mutations of the perlecan gene. Nat. Genet. 2001 Apr;27(4):431-4. Arikawa-Hirasawa et al., "Perlecan is essential for cartilage and cephalic development," Nat Genet. 1999 Nov;23(3):354-8.			Docu	ment No		***					Class	SubClass	Translator Yes No
Arikawa-Hirasawa et al., "Dyssegmental dysplasia, Silverman-Handmaker type, is caused by functional null mutations of the perlecan gene. Nat. Genet. 2001 Apr;27(4):431-4. Arikawa-Hirasawa et al., "Perlecan is essential for cartilage and cephalic development," Nat Genet. 1999 Nov;23(3):354-8.													
Arikawa-Hirasawa et al., "Dyssegmental dysplasia, Silverman-Handmaker type, is caused by functional null mutations of the perlecan gene. Nat. Genet. 2001 Apr;27(4):431-4. Arikawa-Hirasawa et al., "Perlecan is essential for cartilage and cephalic development," Nat Genet. 1999 Nov;23(3):354-8.				отн	ER D	OCU	MENT	'S (including	Author, Title	Date, Pertinent	Pages, Etc.)		
functional null mutations of the perlecan gene. Nat. Genet. 2001 Apr;27(4):431-4. Arikawa-Hirasawa et al., "Perlecan is essential for cartilage and cephalic development," Nat Genet. 1999 Nov;23(3):354-8.	1		Arika	wa-H	irasav	va et	al., "	Dyssegme	ntal dysplasia	, Silverman-H	andmaker	type, is ca	used by
Genet. 1999 Nov;23(3):354-8.	-		funct	ional 1	null m	ıutati	ions o	of the perle	can gene. Nai	. Genet. 2001	Apr;27(4):	431-4.	•
Genet. 1999 Nov;23(3):354-8.	,		Arika	wa-H	irasay	va et	al "	Perlecan is	essential for	cartilage and	enhalia da	volonmon	+ " No+
	•		Gene	1 1990	9 Nov	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	31.35	1 01100an 13 4-8	cssciitiai ioi	carmage and C	epnane de	velopmen	ii, Nai
(aminer to the Considered			00,,,0			,	٠,	1 0.					
Caminer Data Considered													
Raminer Data Considered													
(aminer Anna Market Considered													
Caminer (and the considered)	ĺ												
(aminer to a second description of the considered													
Caminer (and the considered	_												·
(Aminer Land Considered													
(aminer to a second sec								···					
Aminer to a Pote Cossidered													
Zaminer (1.2. Annual Ports Covaidance)		_											
Zaminer (1) Date Covaidand													
Caminer (1) Date Considered													
Caminer (1.2.) Data Covaidand													
Caminer (1) Date Coveridance													
Caminer Date Coveridance												****	
Kaminer (Date Coveridane)													
vaminer (1) Date Considered													
/Maher Haddad/ Date Considered 12/03/2006	kaminer	/Mahe	r Had	dad/	<u>-</u>			Date	Considered	12/03/200	16		

^{*} Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

100		62 05		6 US	}			 				Page 1 of 5
Form I (REV.	10/02 PTO-1449 2-82) P ORMA	U.S. atent	Depai and T	raden	nark (Office	2	TEMENT	Atty. Docket No. A36056-PCT-USA (071838.0142)		al No. 699,035	
1111	ORMA		Y A				SIA		Applicants Bateman et al. OCI	- 1		
	(Us	se sev					ssar	y)	Filing Date October 31, 2003	Grove 164	up Art Unit	
									× 6 TI	RAGE		
							ŧ	J.S. PATEN	T DOCUMENTS			
◆E xa m. Ini		D	ocume	nt No.				Date	Name	Class	Subclass	Filing Date ifAppropriate
MH	4	4	2	4	2	7	9	01/03/84	Bohn et al.	436	534	
MH	4	0	1	8	6	5	3	04/19/77	Mennen	600	572	
мн	4	0	1	6	0	4	3	04/05/77	Schuurs et al.	435	5	
								<u> </u>				
		1	l	·	<u>!</u>	<u>. </u>	<u>. </u>	COREIGN PA	TENT DOCUMENT	<u>- </u>	<u> </u>	1
					-			l l	I DOCOMENT			Translator
	0		cume		1 2	۱ ۵	1 5	06/14/01	100	Class	SubClass	Yes No
MH		1	4	2	2	8	5	06/14/01	WO			
MH	0	1	1	8	0	2	2	03/15/01	wo			
МН	1	0	6	7	1	8	2	01/10/01	EP		X	
мн	0	0	5	8	4	7	3	10/05/00	WO			
мн	9	8	5	3	0	7	1	11/26/98	wo			
		-		тн	ER DO	OCUI	MEN'	TS (including	Author, Title Date, Pertin	ent Pages, Etc.)	•	· · · · · · · · · · · · · · · · · · ·
МН		Ge	nPep	t Da	tabas	se A	cc. N	o. AAH 269	19, submitted April 4,	2002.		
			zgera 5-28(al. ((200	1) "A	new FACIT	of the collagen family	: COL21A1",	FEBS Let	tters 505:
		col	lagei	ns wi	th in	terru	pted	triple helice	n new member of the cos", J. Biol. Chem. 276:	23120-23126.	nily, fibril	-associated
		Dg	ene I	Datal	oase	Acc.	No.	AAB 88340	, entered May 23, 2001			
.1.		Ge	nPen	t Da	tabas	e A	c. N	o. AAK 383	50. submitted April 11.	2001		······································

Examiner	Date Considered	10/00/000	
/Maher Haddad/		12/03/2006	

GenPept Database Acc. No. AAB 42581, entered February 8, 2001.

^{*} Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

		1 ugc 2 01 J
Form PTO-1449 U.S. Department of Commerce (REV. 2-82) Patent and Trademark Office	Atty. Docket No. A36056-PCT-USA-A	Serial No. 10/699,035
•	(071838.0142)	10/099,033
INFORMATION DISCLOSURE STATEMENT	Applicants	
BY APPLICANT	Bateman et al.	
(Use several sheets if necessary)	Filing Date	Group Art Unit
	October 31, 2003	1641

пн	Fitzgerald et al. (2001) "The N-terminal N5 subdomain of the α3(VI) chain is important for
	collagen VI microfibril formation", J. Biol. Chem. 276: 187-193.
	Gilges et al. (2000) "Polydom: a secreted protein with pentraxin, complement control protein, epidermal growth factor and von Willebrand factor A domains", Biochem J. 352: 49-59.
	Chen et al. (1999) "Assembly of a novel cartilage matrix protein filamentous network: molecular basis of a differential requirement of von Willebrand factor a domains", Mol. Biol. Cell 10: 2149-2162.
	Deák et al. (1999) "The matrilins: a novel family of oligomeric extracellular matrix proteins", Matrix Biology 18: 55-64.
	GenPept Database Acc. No. AI 115125, entered September 2, 1998.
	GenBank Acc. No. NP 038620, published in 1998.
	Emsley et al. (1998) "Crystal structure of the von Willebrand factor A1 domain and implications for the binding of platelet glycoprotein Ib", J. Biol. Chem. 273: 10396-10401.
	Emsley et al. (1997) "Crystal structure of the I domain from integrin α2β1", J. Biol. Chem. 272: 28512-28517.
	Kuo et al. (1997) "Type VI collagen anchors endothelial basement membranes by interacting with type IV collagen", J. Biol. Chem. 272: 26522-26529.
	Bienkowska et al. (1997) "The von Willebrand factor A3 domain does not contain a metal ion-dependent adhesion site motif", J. Biol. Chem. 272: 25162-25167.
	Zaverio M. Ruggeri (1997) "Perspectives series: cell adhesion in vascular biology", J. Clin. Invest., 99: 559-564.
	Robertson et al. (1997) "Mapping and characterization of a novel cochlear gene in human and in mouse: a positional candidate gene for a deafness disorder, DFNA9", Genomics 46: 345-354.
	GenBank Acc. No. O 42163, submitted in July 1997.
	GenBank Acc. No. NP 058042, published in 1997.
	GenBank Acc. No. NP 034900, published in 1997.
	Beck et al. (1996) "The C-terminal domain of cartilage matrix protein assembles into a triple-stranded α-helical coiled-coil structure", J. Mol. Biol. 256: 909-923.

Examiner	/Maher Haddad/	Date Considered	12/03/2006	
			22/00/2000	

[•] Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

E. por	70.140.110.7	T	Page 3 of
(REV. 2-	FO-1449 U.S. Department of Commerce -82) Patent and Trademark Office	Atty. Docket No. A36056-PCT-USA-A (071838.0142)	Serial No. 10/699,035
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Applicants	
	(Use several sheets if necessary)	Bateman et al. Filing Date	Group Art Unit
		October 31, 2003	1641
ł	Chan et al. (1996) "Site-directed mutage 13566-13572.	genesis of human type X col	lagen", J. Biol. Chem. 271:
	Tuckwell et al. (1996) "The A-domain but is not a general receptor for the coll		
	GenBank Acc. No. NP 034899, publish	ned in 1996.	
	GenBank Acc. No. 1589549, published	l in 1996.	
	GenBank Acc. No. P11276, submitted	December 1995.	
	Qu et al. (1995) "Crystal structure of the integrin", Proc. Natl. Acad. Sci. USA 9		/CD18 (LFA-1, α _L β2)
•	Haudenschild et al. (1995) "The role of assembly and stabilization of cartilage 23154.		
	Lee et al. (1995) "Crystal structure of the (CDb/CD18)", Cell 80: 631-638.	he domain from the α subun	it of integrin CR3
	Hansen et al. (1995) "Prediction of O-g of UDP-GalNAc: polypeptide N-acetyl		
	Chan et al.(1995) "The three heavy-chanew members of the multicopper oxida and brain", Biochem. J. 306: 505-512.	-	
	Lefebvre et al. (1995) "Type X collager by a temperature-sensitive simian virus		
	Engel et al. (1994) "Domain organization Development Supplement: 35-42.	ons of extracellular matrix p	roteins and their evolution",
	Thompson et al. (1994) "Clustal W: im alignment through sequence weighting, choice", Nucleic Acids Res. 22: 4673-4	, position-specific gap penal	
,	McMahon et al. (1994) "C ₂ C ₁₂ cells: biproperties", Am. J. Physiol. 266: 1795-		immunocytochemical
<u></u>		Willebrand factor binding	, , , , , , , , , , , , , , , , , , ,

Examiner Date Considered 12/03/2006

^{*} Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Page 4 of 5

			1 agc 4 01 3
Form P	TO-1449 U.S. Department of Commerce 2-82) Patent and Trademark Office	Atty. Docket No.	Serial No.
(1027.2	ratent and Frademark Office	A36056-PCT-USA-A (071838.0142)	10/699,035
INFO	ORMATION DISCLOSURE STATEMENT	Applicants	
	BY APPLICANT	Bateman et al.	
	(Use several sheets if necessary)	Filing Date	Group Art Unit
		October 31, 2003	1641
γ	Character (1002) (Characterization of		1 4'4 4' - 1 (II)
МІН	Chan et al. (1993) "Characterization of collagen chains of a patient with spond 15245.	an arginine 789 to cysteine yloepiphyseal dysplasia", J.	Biol. Chem. 268: 15238-
	Colombatti et al. (1993) "Type A mode collagens and in other extracellular ma		
	GenBank Acc. No. P 56199, published	in 1993.	
	GenBank Acc. No. S 78476, submitted	January 1993.	
	Trueb et al. (1992) "Type XIV collager 557.	n is a variant of undulin", Eu	ur. J. Biochem., 207: 549-
	Specks et al. (1992) "Structure of record and its binding to heparin and hyaluron		
	Yamagata et al. (1991) "The complete molecule with reiterated fibronectin typhomologous to a nancollagenous region with an Arg-Gly-Asp site", J. Cell Biol	pe III motifs, von Willebran n of type IX collagen, and sl	d factor a motifs, a domain
	Parente et al. (1991) "Human type VII the gene", Proc. Natl. Acad. Sci. USA		d chromosomal mapping of
	Chu et al. (1990) "Mosaic structure of a chain: similarity to von Willebrand factype protease inhibitors", EMBO J. 9: 3	tor, fibronectin, actin, saliva	
	GenBank Acc. No. NP 000204, publish	ned in 1990.	
	Chu et al. (1989) "Sequence analysis of reveals internal triplication of globular factor and two α2(VI) chain variants the 1946.	domains similar to the A do	mains of von Willebrand
	Ellis et al. (1988) "Sequence and expre DHP-sensitive calcium channel", Scien		he α_1 and α_2 subunits of a
<u> </u>	GenBank Acc. No. NP 004361, publish	ned in 1987.	
▼-	Sadler et al. (1985) "Cloning and chara	otonination of true aDNIA a a	- 4' C1

Examiner		Date Considered	
	/Maher Haddad/		12/03/2006

^{*} Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

			Page 5 of 5
(REV. 2-8	O-1449 U.S. Department of Commerce 2) Patent and Trademark Office RMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	Atty. Docket No. A36056-PCT-USA-A (071838.0142) Applicants Bateman et al. Filing Date	Serial No. 10/699,035
		October 31, 2003	1641
МН	Mole et al. (1984) "Complete primary B", J. Biol. Chem. 259: 3407-3412. Bateman et al. (1984) "Abnormal type osteogenesis imperfecta", Biochem. J.	I metabolism by cultured fil	-
	Schneike et al. (1983) "Embryonic lett the α1(I) collagen gene", Nature 304:		by retrovirus insertion into
	Sudo et al. (1983) "In vitro differentia derived from newborn mouse calvaria"		w clonal osteogenic cell line
	Paulsson et al. (1982) "Radioimmunoa 207: 207-213.	assay of the 148-kilodalton c	artilage protein", Biochem. J.
	GenBank Acc. No. NM 013556, publi	shed in 1982.	
	Bonner et al. (1974) "A film detection polyacrylamide gels", Eur. J. Biochem		proteins and nucleic acids in
	Marmur et al. (1962) "Determination of thermal denaturation temperature", J. I		eoxyribonucleic acid from its
МН	Allen et al. (2006) "WARP is a novel matrix that interacts with perlecan", J.		- -

Examiner		Date Considered	_	
	/Maher Haddad/		12/03/2006	

Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.